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PRESS RELEASE

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ASECNA and CNES sign new cooperation agreement on first operational SBAS in Africa

Friday 17 June, Mohamed Moussa, Director General of the Agency for the Safety for Air Navigation in Africa and Madagascar (ASECNA), and Philippe Baptiste, Chairman & CEO of the French space agency CNES (Centre National d'Etudes Spatiales), signed a new agreement concerning the project to develop, deploy and commission ASECNA's Satellite Based Augmentation System (SBAS). The seven-year agreement sets out the terms and provisions for providing management assistance in systems engineering for the ground segment, the space segment and system performance.

CNES has been working with ASECNA to design its SBAS since 2011, notably on research and development to improve ionospheric disturbance processing algorithms. From 2017 to 2021, CNES assisted ASECNA with management of the system definition and design phase. This phase also demonstrated with real test signals in 2020 and 2021 the adequacy of technical choices and the quality of services targeted for the expected service area, while conducting field demonstrations to promote the system's benefits to users.

Similar to the European Geostationary Navigation Overlay System (EGNOS), this SBAS is set to provide a Safety-of-Life service enabling reliable use of GPS signals for air navigation during all stages of flight from the en-route phase to landing. It will enhance flight safety and efficiency while reducing their environmental impact. The system will also offer an Open Service with greater accuracy than Global Navigation Satellite Systems (GNSS), expected to mirror that of EGNOS (0.5 metres). It will be the first operational SBAS in Africa. Its services will be in line with the recommended standards and practices of the International Civil Aviation Organization (ICAO) and compatible with SBAS avionics already operated by commercial airlines.

Besides the political and operational stakes for ASECNA of securing its own means for improving air traffic management and making it safer, this SBAS will be meeting a major technical challenge. It will be the first system of its kind to be operated in an equatorial region, and therefore the first SBAS in the world to provide such a service despite the ionospheric disturbances that are strongest around the equator. Using Galileo satellites as well as GPS will enable more measurements of the ionosphere, crucial to resolving this issue.

This implementation of SBAS in Africa, affording a common capability developed by a large number of countries, marks a further step towards the construction of a single sky for managing the continent's air traffic, thereby supporting the Single African Air Transport Market (SAATM) and the African Union Agenda 2063.

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